
*SOCIO-DEMOGRAPHIC FACTORS ASSOCIATED WITH
UNPLANNED PREGNANCY AMONG UNMARRIED
FEMALE YOUTH (15-24) IN BOTSWANA*

Mabe K and Ngome E

Affiliation: Department of Population Studies, University of Botswana

Author's contact E-mail: mabekebonitse@ymail.com and enock.ngome@gmail.com

Background: The aim of this study is to determine socio-demographic factors associated with unplanned pregnancy for unmarried female youth of Botswana. Youth have high levels of risk of death due to amplified chances of complications during pregnancy and childbirth. Approximately 16 million aged 15 to 19 years give birth and a majority of these are unplanned. The risks of unplanned pregnancy in sub-Saharan Africa remains high and is poorly resolved due to poor access to reproductive health care.

Methods: This study uses secondary data from the 2013 Botswana AIDS Impact Survey (BAIS IV). During the survey respondents were asked if she had ever given birth and whether their last pregnancy was planned or unplanned. A weighted sample of 167 unmarried female youth aged 15 to 24 years was used to examine factors associated with unplanned pregnancies among the youth of Botswana. Analysis involved univariate, bivariate and multivariate analysis using Statistical Package for Social Sciences (SPSS) version 25.

Results: Findings indicate that almost 60% of unmarried female youth in Botswana did not planned for their last pregnancy. Logistic regression analysis revealed that having an unplanned pregnancy by unmarried female youth was associated with age, religion, employment status, level of education and residence. The odds of unplanned pregnancy increased with level of education (OR: 1.9-2.2), unemployed female youth (OR: 1.6) and religious affiliation (OR: 1.1), age (OR: 0.6), also odds were less for those residing in rural areas (OR: 0.6). Parity was not significantly associate with unplanned pregnancy.

Conclusion and implications: There are high rates of unplanned pregnancies for unmarried female youth in Botswana which affects their life style and community at large. Policy deviations are needed to improve collaboration between unplanned pregnancies among youth especially bachelor once. The government should introduce sexual and reproductive health policy interventions to ensure that unmarried female youth wait to plan their pregnancies.

Key words: Unplanned pregnancy, unmarried, youth

INTRODUCTION

Approximately 86 million pregnancies worldwide in 2008 were unplanned, with 74 million of these occurring in less developed countries (Sedgh, 2014). Studies shows that 39% of unplanned pregnancies in 2008 resulted in live births, 48% in abortions and 13% in miscarriages (Yazdkhasti, 2015). Unplanned pregnancy is a major public health burden because it is linked with negative health, social and economic consequences.

Studies have shown that approximately 28% of unplanned pregnancies in developing countries can be avoided. Planned or intended pregnancies empower women to improve decision making regarding antenatal care (ANC), prenatal diagnosis and prevent exposure to teratogenic substances thus enhancing the health and growth of the developing child (Haffejee F, 01 Dec 2017).

The risk of unplanned pregnancy in sub-Saharan Africa remains high and is poorly resolved due to poor access to reproductive health care and in Botswana 44% of pregnancies are reported to be unplanned. The health and social consequences of unwanted or unplanned pregnancy have been very much described. These include, among others, increased risk of

maternal death, pregnancy and birth-related complications such as excessive bleeding and infant death.

There are some socio-economic factors effects associated with unplanned pregnancy which includes educational and work termination, stigmatization as well as loss of self-esteem and continuation of the poverty trap and cycle (Yazdkhasti, 2015). With the rampaging HIV/AIDS epidemic and other sexually transmitted diseases in the sub-Saharan region, unplanned pregnancy among unmarried young women has become a disturbing public health problem, not only because it is a risk factor for HIV/AIDS transmission but also because it possess a serious adolescent reproductive health and development challenge (WHO, 2007).

During the 20th century a decline in the rates of pregnancy because of the introduction and use of contraceptives as well as education where more information was provided to youth about its dangers and how they can sidestep it. However in the contemporary world, even after contraceptives and education youth pregnancy still persists to be a major issue of concern across communities. More especially when it comes to its effects on the life style of unmarried youth aged 15-24 years.

For 2010, the total number of adolescents was estimated at 1.2 billion, representing 18 percent of total world population and over 580 million were female adolescents. Among female adolescents thus gives the higher risks they confront during pregnancy and motherhood (UNFPA New York, 2013). Fifty five percent of the global total of adolescents lived in Asia and the Pacific with 29 percent in South Asia and 26 percent in East Asia and the Pacific including China ((UNICEF), November 2006). Adolescents in Sub-Saharan Africa accounted for about 16 percent of the world total which was equally divided between Eastern and Southern Africa, West and Central Africa.

At the global level, over 9 out of 10 adolescents are currently not married (Loaiza E, 2013). An estimated 44% of pregnancies global were unplanned in 2010 to 2014 and declined in developed regions whereas in developing regions fell at the rate of 16% between 2010 and 2014 (Jonathan Bearak, 2018). Thus led to higher unplanned pregnancy in developed regions unlike in developed regions.

Botswana has a youthful population which is almost 53 per cent of the population and under 25 years 21% are adolescents. The ongoing demographic transition has provided a window of

opportunity for strategic investments to maximize the potential demographic dividend. Botswana suffers from severe prolonged drought and as such women and girls are among the most vulnerable and the most affected by poverty and inequality (Gini coefficient of 0.61). Most of youth aged 15-24 years are unemployed and are forced to find alternative ways to earn a living, making them susceptible to sexual abuse, gender-based violence, exploitation and unplanned pregnancies.

RESEARCH QUESTION

What are socio-demographic factors associated with unplanned pregnancy among the unmarried female youth in Botswana? There are high rates of unplanned pregnancies for unmarried female youth in Botswana which affects their life style and community at large.

Unplanned pregnancy results in difficult of unmarried youth life style in terms of nursing their babies as well as recover from child birth. The youth will hence be left behind in school work if she is schooling. They are as a result forced to repeat their modules or courses which may result to discrimination from other students and also exposed them to sexually infections. In

the sense that they will be shamed for being mothers at a young age. This hence affects them in the short term as well as in the long term periods of their lives.

The main general objective of the study is to determine socio-demographic factors associated with unplanned pregnancy of unmarried female youth of Botswana. Specifically to establish the level and examine the relationship between unplanned pregnancies associated with socio-demographic factors of unmarried female youth in Botswana.

DEFICIENCIES IN THE EXISTING LITERATURE

The majority of the studies investigate the effects of unplanned pregnancy among youth and the outcomes of pregnancy. The study examined the effects of the pregnancy from conception through the pregnancy's outcome some examined long term or on-going effects that youth experienced after the termination or miscarriage. Where my studying will further look into determining the socio-demographic factors associated with unplanned pregnancy for unmarried female youth of Botswana. Also to establish the level and examine the

relationship between unplanned pregnancies associated with socio-demographic factors of unmarried female youth in Botswana.

THEORETICAL FRAMEWORK

Looking at youth pregnancy through the outlook of conflict theory's there are conflict between religion and unmarried pregnancy, morals and school about youth pregnancy (Ortiz, 10). Most religions advocate abstinence until marriage. One third of girls become pregnant before age 20, and of those pregnancies 81% is to unmarried couples (Demand Media, 2010). This shows that the majority of pregnancies go against most religious teachings of abstinence before marriage.

Functionalism is the final perspective used to describe pregnancy. Unmarried youth who is schooling will end up having many people at school or work gossiping about them and the family talking about what happened. Thus leading to one's life changes and dropping out of school or job and colleges that will allow you to further your education become very limited

METHODOLOGY

Data source

The study will make the most of secondary data from the Botswana AIDS Impact Survey (BAIS IV) of 2013. Cluster sampling will be used to select unmarried female youth with respect to their pregnancy.

SAMPLE SIZE

The target population of this study focused on unmarried female youth of Botswana who had unplanned pregnancy five years of preceding survey. A weighted sample of 167 unmarried youth who had given birth five years preceding the time of survey.

VARIABLES

Dependent variable

The main dependent variable will be based on whether the last pregnancy was planned or unplanned.

The individual was asked if she had ever given birth in five years preceding the time of survey, options (yes/no) and when the answer was "YES", the following question

asked was the last pregnancy was planned given the options of either yes or no.

Independent variables

Included demographic and socioeconomic factors such as age, residence either rural or urban, level of education, religion, parity, employment status.

Descriptive of independent variables

Age group: this will be the numbers of last years celebrated as birthday by unmarried youth in Botswana. They will be grouped into 15-19 years and 20-24 years recorded from age of respondent.

Residence: it is the dwelling place of respondents either rural or urban.

Education level: this will be the measure used to attain the educational level of respondents categorized into three. That will be if the individual has attained primary or less level, junior combined with senior to be secondary, then lastly tertiary.

Religion: a set of beliefs that are passionately held by a group of people. Those will be recorded into two groups namely Christianity and other religions.

Parity: it is the number of times unmarried youth has been pregnant. This will be grouped or recorded into number of children the youth had. That is, first group will be those who had one or two children, second group will be of those who have 3 or more children.

Employment status: this measure will focus on whether the youth is employed or unemployed.

DATA ANALYSIS

The method used to analyze this data was statistical Package for Social Sciences (SPSS). The use of frequency tables will be used to present the distribution of sample by background characteristics. At bivariate analysis, crosstabs for dependent variable were tabulated against independent variables. Chi-square test of association will be used to test any association between these independent variables and dependent variable. Logistic regression models also was developed

to establish relationship between independent variables and was the last pregnancy unplanned.

LIMITATIONS OF THE STUDY

The main goal of the study was to examine the influence of socio-demographic variables on unplanned pregnancy among unmarried female youth. Variables considered were limited to the quality and access of reproductive health care information and socioeconomic development indicators.

Other important community characteristics such as political and cultural factors were not covered through which were to help to explained some of the variations across sides that were still not explained by the study. The aspect of access to data was only limited to secondary data from the Botswana AIDS Impact Survey (BAIS IV) of 2013 whereas areas such as exposure to family planning messages were not considered and hence this might bias the effect of media access. Another limitation to the study is the use of religion instead of pro-natalist cultural values related to some religions which may have been important as characteristics of such communities in which marriages take place with young girls.

The survey was used to collect data and as such there was hesitation to discuss sensitive topics. The longer the interview continues, the more people will “drop out” and not fully answer the questions. Questions was also involved thus means simple and clearly stated questions are complicated and long questions were not appropriate. Associations established by the study do not therefore show any causality relationship. It should be noted that current planning for pregnancy may be influenced by more proximal factors that affect the day to day life and activities of youth.

RESULTS

PROFILE OF RESPONDENTS/ BACKGROUND CHARACTERISTICS OF RESPONDENTS

BACKGROUND CHARACTERISTICS		FREQUENCY	PERCENT
Age in 5-year groups	15-19	30	18.0
	20-24	137	82.0
Educational level	Primary/less	27	16.2
	Secondary	125	74.9
	Tertiary	15	9.0
Residence	Urban	84	50.3
	Rural	83	49.7

BACKGROUND CHARACTERISTICS		FREQUENCY	PERCENT
Employment status	Employed	33	19.8
	Unemployed	134	80.2
Religion	Christianity	149	89.2
	Others	18	10.8
Parity	1-2	97	58.1
	≥ 3	70	41.9
TOTAL		167	100

Table 1: profile of respondents

A total of 167 unmarried female youth who were involved during the case study who gave birth five years preceding the time of survey. The above table presents the different backgrounds of respondents, from the case study 18% of respondents were aged between 15 and 19 and 50.3% were residing in urban areas. With respect to their educational level, 16.2% reported to have primary/less educational level whereas 74.9% reported to had pass through secondary level of education compared to 9.0% who had attained tertiary level. Continue with the data proved or evidenced that 89.2% female youths were affiliated with Christianity and the rest were from other different religions. The highest percentage (58.1%) had one to two children.

BIVARIATE ANALYSIS

BACKGROUND CHARACTERISTICS		Was the last pregnancy planned				Total
		Planned		Unplanned		
		N	%	N	%	
Age groups***	15-19	12	40	18	60	30
	20-24	56	40.9	81	59.1	137
Educational level***	Primary/less	11	40.7	16	59.3	27
	Secondary	50	40	75	60	125
	Tertiary	7	46.7	8	53.3	15
Residence***	Urban	32	38.1	52	61.9	84
	Rural	36	43.4	47	56.6	83
Employment status***	Employed	14	42.4	19	57.6	33
	Unemployed	54	40.3	80	59.7	134
Religion***	Christianity	60	40.3	89	59.7	149
	Others	8	44.4	10	55.6	18
Parity	1-2	37	38.1	60	61.9	97
	≥ 3	31	44.3	39	55.7	70
Total			40.7		59.3	167

Table 2: Bivariate analysis

In table 2, was the last pregnancy planned (dependent variables) are presented by socioeconomic and demographic characteristics. The table shows that almost 40.7% of youth planned for the pregnancy. 40% of youth aged 15-19 confirmed

that they planned for their pregnancy whereas 59.1% of unmarried youth aged 20-24 did not planned for pregnancy. Participants with primary or less 40.7% of them said yes they planned for their pregnancy while 60% from secondary did not

planned for pregnancy. Also 46.7% of those who passed through tertiary level planned for the pregnancy. Regarding residence of respondents more than half (61.9% and 56.6%) did not planned for pregnancy in urban and rural respectively. 42.4% reported being employed compared to 40.3% of unemployed who said yes they planned for pregnancy. Nonetheless, 59.7% were Christians reported not planned and

h44.4% who said yes were non-Christians. Approximately 61.9% of unplanned pregnancy resulted for unmarried youth who had have one or two children and 44.3% were planned for those who had 3 or more children.

MULTIVARIATE ANALYSIS

Table 3: Multivariate analysis

			95% CI for EXP(B)		
BACKGROUND CHARACTERISTICS		Significance	Odd ratio/ Exp(B)	Lower	Upper
Age in 5-year groups***	15-19		1(ref)		
	20-24	0.000	0.621	0.577	0.667
Educational level***	Primary/less		1(ref)		
	Secondary	0.000	1.927	1.793	2.072
	Tertiary	0.000	2.188	1.956	2.446
Residence***	Urban		1(ref)		
	Rural	0.000	0.581	0.548	0.616
Employment status***	Employed		1(ref)		
	Unemployed	0.000	1.623	1.509	1.746
Religion ***	Christianity		1(ref)		
	Others	0.008	1.114	1.028	1.207
Parity	1-2		1(ref)		
	≥ 3	0.724	0.990	0.936	1.047
Constant		0.259	1.065		

From the table above it displays the association of planned pregnancy and the socio-demographic characteristics. Besides parity all other characteristics were significant. Individuals who were aged 20 to 24 years were two times less likely to plan for their pregnancy as compared to those aged 15-19. Female youth who passed through secondary were (1.793 Odds) more likely to plan for pregnancy as compared to those who processed primary or less, also those with tertiary level were almost 46% more likely to plan for their pregnancy compared to those with primary or less level of education. Regarding the place where unmarried female youth reside it is evidence that those who were in rural areas were two times less likely to plan for their pregnancies. Those who were unemployed 1.623 (EXP B) were more likely to plan for pregnancy compared to those who were employed. Looking at religious affiliation those who were from other religions apart from Christianity they were (1.114 Odds) more likely to plan for pregnancy.

DISCUSSIONS

The result verified that unplanned pregnancy among unmarried youth aged between 15 to 24 years, who had given birth 5 years

preceding the time of survey tend to vary across the age, residence, educational level, employment status, religious affiliation and the number of children the youth had (parity). The results demonstrated that there was association between the age, level of education, residence, religious affiliation and employment status of unmarried female youth with planning of pregnancy.

With reference to profile of respondents a total of 167 female youth who participated in study majority of them 82% were aged between 20 and 24 and 50.3% were residing in urban areas. With respect to their educational level, most of them 74.9% reported to have passed through secondary level of education and statistics proved or evidenced that 89.2% female youths were affiliated with Christianity. The highest percentage (58.1%) had one to two children. The results supported data from demographic transaction that states most of youth aged 15-24 years are unemployed, which is the case 80.2% of unmarried youth were unemployed in Botswana.

Further objective of the study was to establish the level of unplanned pregnancy associated with socio-demographic factors of unmarried youth in Botswana. From the results

evidenced that 40.7% of youth planned for the pregnancy which exceed the estimated 44% of unplanned pregnancies globally in 2010 and 2014. 40.9% of youth aged 20-24 confirmed that they planned for their pregnancy and most of them (46.7%) voted for tertiary level. Regarding residence of respondents, majority of youth 43.4% who planned for their pregnancy were from rural areas as compared to 38.1% residing in urban areas. 40.3% of unemployed youth planned for pregnancy. On other hand majority were from other religion (44.4%) besides Christianity and approximately 45% were planned for those who had 3 or more children.

Regarding the examining of association of unplanned pregnancy and the socio- demographic characteristic. Beside parity all other characteristics were significant. Youth who were aged 20 to 24 years were two times less likely to plan for their pregnancy as compared to those aged 15-19. Female youth who passed through secondary were (1.793 Odds) more likely to plan for pregnancy also those with tertiary were almost 46% more likely to plan for their pregnancy compared to those with primary or less level of education. Regarding the place where unmarried female youth reside it evidence that those who were

in rural areas were two times less likely to plan for their pregnancies. Those who were unemployed 1.623(EXP B) were more likely to plan for pregnancy compared to those who were employed. Looking at religious affiliation those who were from other religions apart from Christianity they were (1.114 Odds) more likely to plan for pregnancy.

In conclusion the result evidenced that there was association between the age, level of education, residence, religious affiliation and employment status of unmarried female youth with planning of pregnancy. About 40.7% of pregnancy were planned among unmarried female youth aged 15-24 years in Botswana. Policy deviations are needed to improve collaboration between unplanned pregnancies among youth especially bachelor once. In order to reduce unplanned pregnancy and its risks towards unmarried female youth in Botswana, the government should introduce sexual and reproductive health policy interventions to ensure that unmarried youth wait to plan their pregnancies.

References

- (UNICEF), U. N. (November 2006). *Adolescent Development in East Asia and the Pacific: Realizing Their Potential*. New York: United Nations Children's Fund (UNICEF).
- Demand Media. (2010, July 8). *Teen Pregnancy Rates in the USA*. Retrieved from <http://www.livestrong.com/article/12504-teen-pregnancy-rates-usa/>:
<http://www.livestrong.com/article/12504-teen-pregnancy-rates-usa/>
- Haffejee F, G. N. (01 Dec 2017). Factors associated with unintended pregnancy among women attending a public health facility in KwaZulu-Natal, South Africa.
- Jonathan Bearak, P. A. (2018). Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014.
- Loaiza E, L. M. (2013). *ADOLESCENT PREGNANCY: A Review of the Evidence*. New York: UNFPA .
- Ortiz, C. (10, 01 7). Retrieved from <http://coryeportfolio.yolasite.com/resources/SOCIOLOGY%201010%20Theoretical%20Perspectives%20EP%20upload.pdf>
- Sedgh, G. &. (2014). Intended and Unintended Pregnancies Worldwide in 2012 and Recent Trends. *Studies in family planning*, 45(3), 301–314. doi:10.1111/j.1728-4465.2014.00393.x.
- WHO. (2007). *GLOBAL STRATEGY*.
- Yazdkhasti, M. P. (2015). Unintended Pregnancy and Its Adverse Social and Economic Consequences on Health System: A Narrative Review Article.
- Eliason S, Baiden F, Yankey BA, et al. Determinants of unintended pregnancies in rural Ghana. *BMC Pregnancy Childbirth*. 2014;14(1):261. <https://doi.org/10.1186/1471-2393-14-261>
- Mayondi GK, Wirth K, Morroni C, et al. Unintended pregnancy, contraceptive use, and childbearing desires among HIV-infected and HIV-uninfected women in Botswana: a cross-sectional study. *BMC Public Health*. 2016;16(1):44
- Singh S , Sedgh G , Hussain R . Unintended pregnancy: worldwide levels, trends, and outcomes. *Stud Fam Plann*. 2010
- Firoza Haffejee, Laura O'Connor, Nalini Govender, Poovendhree Reddy, Maureen Nokuthula Sibiyi, Shanaz Ghuman, Thembelihle Ngxongo & Dorinda Borg (2018) Factors associated with unintended pregnancy among women attending a public health facility in KwaZulu-Natal, South Africa, *South African Family Practice*, 60:3, 79-83, DOI: [10.1080/20786190.2017.1396790](https://doi.org/10.1080/20786190.2017.1396790)
- Jonathan Bearak, Anna Popinchalk, Leontine Alkema*(2018) Global, regional, and sub-regional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model